

Substance Abuse and Mental Health Services AdministrationDISASTER TECHNICAL ASSISTANCE CENTER

RESOURCE LIST

Terrorism, Bioterrorism and Mental Health

Prepared by the Substance Abuse and Mental Health Services Administration (SAMHSA) Disaster Technical Assistance Center (DTAC), ESI, under contract with the Emergency Mental Health and Traumatic Stress Services Branch, Center for Mental Health Services, SAMHSA.

Peer-Reviewed Journal Articles

Baker, D.R. (2002). A public health approach to the needs of children affected by terrorism. *Journal of the American Medical Women's Association*. 57(2): 117-8, 121.

Children who have witnessed large-scale disasters exhibit emotional, physical, and psychological reactions, and the recent devastating terrorist attacks may have also increased the risks of substance abuse and mental illness. The author argues a public health strategy is needed to address the needs of America's children.

Becker, S.M. (2001). Are the psychosocial aspects of weapons of mass destruction incidents addressed in the Federal Response Plan: Summary of an expert panel. *Military Medicine*. 166(12 Suppl):66-8.

A panel made up of representatives from Federal agencies, the armed services, and the academic community, addressed the extent to which psychosocial issues are integrated into the Federal Response Plan. The panel also recommended areas where further assessment is necessary to maximize efforts in consequence management.

Becker, S.M. (2001). Meeting the threat of weapons of mass destruction terrorism: Toward a broader conception of consequence management. *Military Medicine*. 166(12 Suppl):13-6.

The article outlines six limitations of current practices in dealing with the psychosocial issues surrounding weapons of mass destruction. These limitations include a minimal focus on long-term recovery issues, a lack of attention on social issues, no consideration for scenarios with primarily psychosocial effects, limited incorporation of social and behavioral science research, lack of an integrated overall response, and insufficient attention to fundamental issues such as re-establishment of trust after a disaster.

Bell Meisenhelder, J. (2002). Terrorism, posttraumatic stress, and religious coping. *Issues in Mental Health Nursing*. 23(8):771-82.

The article assesses whether an increase in attendance at religious services, combined with a posttraumatic stress reaction, is a recognized indicator of posttraumatic stress disorder. The author further investigates, with an emphasis on nursing implications, the positive and negative aspects of religious coping.

Benedek, D.M., Holloway, H.C., and Becker, S.M. (2002). Emergency mental health management in bioterrorism events. *Emergency Medicine Clinics of North America*. 20(2):393-407.

The article provides recommendations for communities in planning to respond to a bioterrorism threat. Training, public communication, and regular practice could alleviate the chaos that could accompany a bioterrorist attack. The authors stress the importance of training and preparation for emergency medical responders because they will identify the attack, and they must distinguish the medically unaffected, who might display similar symptoms due to fear of exposure, from the medically affected.

Bernardo, L.M. (2001). Pediatric implications in bioterrorism Part I: Physiologic and psychosocial differences. *International Journal of Trauma Nursing*. 7(1): 14-6.

This is the first part of a series discussing how a child's level of development will affect his/her response to a bioterrorism attack, and how to modify intervention strategies to address children.

Blendon, R.J., DesRoches, C.M., Benson, J.M., Herrmann, M.J., Taylor-Clark, K., and Weldon, K.J. (2003). The public and the smallpox threat. *New England Journal of Medicine*. 348(5):426-32.

This article reports on a random-digit dialing survey of 1,006 adults regarding the public's knowledge of the smallpox disease as a bioterrorism threat, health precautions, and proposed State legislation. Results indicate that a majority of respondents have a variety of false beliefs about smallpox and that a majority support States' proactive positions. The authors conclude there is a need for public education about smallpox.

Bozzette, S.A., Boer, R., Bhatnagar, V., Brower, J.L., Keeler, E.B., Morton, S.C., and Stoto, M.A. (2003). A model for a smallpox-vaccination policy. *New England Journal of Medicine*. 348(5):416-25.

This study assessed models for smallpox vaccinations through employing different attack scenarios, from a laboratory accident to a high-impact airport attack, predicting and evaluating the effects of the attack. The survey concluded that following an attack, the benefits of mass vaccination of the public in the affected area would be minimal. The authors favor the prior vaccination of healthcare workers unless the risk of attack is very low, and vaccination of the public only if the risk of attack is high.

Brown, E.J. (2002). Mental health trauma response to the events of September 11th: Challenges and lessons learned. *Journal of Child and Adolescent Psychopharmacology*. 12(2):77-82.

An editorial from a professor at the New York University Child Study Center discusses the forms, process, and importance of early interventions in children after the September 11 attacks. The author advocates for a continued emphasis on long-term recovery in New York City, as Oklahoma City bombing research indicates that children required assistance three to five years following the event.

Covello, V.T., Peters, R.G., Wojtecki, J.G., and Hyde, R.C. (2001). Risk communication, the West Nile virus epidemic, and bioterrorism: Responding to the communication challenges posed by the intentional or unintentional release of a pathogen in an urban setting. *Journal of Urban Health*. 78(2):382-91.

The authors apply the risk communication perspective to the intentional or unintentional introduction of a pathogen, such as the West Nile virus epidemic, into an urban setting. The article discusses the public perception of a disease outbreak, and how communication might best be managed.

Curran, P.S. (1988). Psychiatric aspects of terrorist violence: Northern Ireland 1969-1987. *British Journal of Psychiatry*. 153:470-5.

The changing dynamic of terrorism in Northern Ireland has resulted in a minimal psychological impact on society, as illustrated through suicide rates, psychotropic drug usage, and hospital data. The authors present several possible explanations.

DiGiovanni, C., Jr., Reynolds, B., Harwell, R., Stonecipher, E.B., and Burkle, F.M., Jr. (2003). Community reaction to bioterrorism: Prospective study of simulated outbreak. *Emerging Infectious Diseases*. 9(6):708-12.

A simulation of Rift Valley fever outbreak in the southern United States was used to evaluate public responses in the event of bioterrorism. Anonymous respondents indicated the public trusted local sources of news and information.

DiGiovanni, C., Jr. (2001). Pertinent psychological issues in the immediate management of a weapons of mass destruction event. *Military Medicine*. 166(12 Suppl):59-60.

The author has compiled a list of 12 recommendations for crisis response managers to assist in preparing for a domestic terrorist incident. Suggestions include participating in training exercises, assessing the feasibility of quarantine, and evaluating local mental health crisis intervention teams.

DiGiovanni, C., Jr. (1999). Domestic terrorism with chemical or biological agents: Psychiatric aspects. *American Journal of Psychiatry*. 156(10):1500-5.

The author discusses the mental health consequences of a chemical or biological terrorist attack and approaches to crisis intervention, and strongly encourages the training and preparation of psychiatrists and the mental health community in disaster response.

Everly, G.S., Jr. (2003). Pastoral crisis intervention in response to terrorism. *International Journal of Emergency Mental Health*. 5(1):1-2.

The article discusses the presence, importance, and value of pastoral crisis intervention in disaster response.

Everly, G.S., Jr. (2002). Responding to bioterrorism and psychological toxicity: An introduction to the concept of shielding. *International Journal of Emergency Mental Health*. 4(4):231-3.

An editorial discussing the importance of crisis intervention in bioterrorism attacks. The psychological toxicity of terrorism has yielded shielding as a new response to a bioterrorist agent.

Everly, G.S., Jr. and Mitchell, J.T. (2001). America under attack: The "10 commandments" of responding to mass terrorist attacks. *International Journal of Emergency Mental Health*. 3(3):133-5.

This article summarizes recommendations for responding to acts of terrorism, and provides a structure for assessing the phases of terrorism and the long-term effects of the September 11 attacks.

Everly, G.S., Jr. (2000). The role of pastoral crisis intervention in disasters, terrorism, violence, and other community crises. *International Journal of Emergency Mental Health*. 2(3):139-42.

The author provides a public health model for incorporating pastoral crisis intervention services within community, State, and national disaster response and emergency mental health.

Goldman, W. (2002). Best practices: Terrorism and mental health: Private-sector responses and issues for policy makers. *Psychiatric Services*. 53(8):941-3.

The author discusses a plan of how public and private mental health organizations might partner together in a disaster to create a united national emergency disaster response system.

Gray, G.M. and Ropeik, D.P. (2002). Dealing with the dangers of fear: The role of risk communication. *Health Affairs*. 21(6):106-16.

After September 11, the public responded to fears of terrorism by choosing to drive rather than fly and taking preventive antibiotic medications in case of an anthrax attack. The authors argue that these fearful behaviors could be minimized through a greater emphasis on risk communication.

Hanze, D. (2002). How to help children and adolescents deal with the threat of terrorism. *Journal for Specialists in Pediatric Nursing*. 7(1):42-4.

This editorial discusses how to work with children's fears and anxieties, and how to treat children who have been severely traumatized.

Harbison, S. and Novak, J.C. (2002). Bioterrorism, children, and the United States' health and security. *Journal of Pediatric Health Care*. 16(5):265-6.

The author details the Bioterrorism Preparedness Act, which establishes initiatives such as national preparedness and response planning, development of national stockpiles, enhancement of controls on dangerous biologic agents, and protecting the safety of the water supply. This preparedness planning is contrasted with the national nursing shortage and an impending public health crisis if it is not resolved.

Hyams, K.C., Murphy, F.M., and Wessely, S. (2002). Responding to chemical, biological, or nuclear terrorism: The indirect and long-term health effects may present the greatest challenge. *Journal of Health Politics, Policy and Law.* 27(2):273-91.

The authors advocate a greater emphasis on the indirect effects of bioterrorism attacks, especially on the medical, social, economic, and legal long-term consequences. The authors further recommend working toward a comprehensive plan incorporating emergency response with health care, risk communication, economic assistance, and government legislators.

Kawana, N., Ishimatsu, S., and Kanda, K. (2001). Psycho-physiological effects of the terrorist sarin attack on the Tokyo subway system. *Military Medicine*. 166(12 Suppl):23-6.

This study follows the victims of the 1995 Tokyo sarin attack, surveying the group two, three, and five years following the attack. Interventions, medical treatments, and counseling are all associated with fewer symptoms of posttraumatic stress disorder. Researchers also recommend new posttraumatic stress disorder diagnostic criteria.

Knudson, G.B. (2001). Nuclear, biological, and chemical training in the U.S. Army Reserves: Mitigating psychological consequences of weapons of mass destruction. *Military Medicine*. 166(12 Suppl):63-5.

The author discusses the preparations, training, and equipment of the United States Army Reserves as the first line of defense against biological, nuclear, and chemical weapons of mass destruction that threaten national security. Effective training and confidence in defense will minimize psychological and physical casualties in the event of an attack.

Kron, S. and Mendlovic, S. (2002). Mental health consequences of bioterrorism. *Israel Medical Association Journal*. 4(7):524-7.

This article discusses a disaster model and its application to a bioterrorism attack on a large population. Bioterrorism management is further assessed, and the authors stress early detection and information dissemination as crucial methods to combat public panic.

Lanza, M.L. (1986). Victims of international terrorism. *Issues in Mental Health Nursing*. 8(2):95-107.

The author uses a personal narrative of a recent trip to Israel to illustrate the magnitude of the problem of terrorism. The focus is on hostage situations and implications for families of the missing, prevention measures, and the resulting impact on the field of nursing.

Laor, N., Wolmer, L., Spirman, S., and Wiener, Z. (2003). Facing war, terrorism, and disaster: Toward a child-oriented comprehensive emergency care system. *Child and Adolescent Psychiatric Clinics of North America*. 12(2):343-61.

The authors advocate for an ecological systems approach for children affected by disasters, appealing to institutions of health, education, and government to cooperate and network on local, national, and international levels to increase awareness and lessen the impact of disasters on children.

Lord, E.J. (2001). Exercises involving an act of biological or chemical terrorism: What are the psychological consequences? *Military Medicine*. 166(12 Suppl): 34-5.

The author discusses the psychological elements of biological disaster drills to raise awareness for mental health preparedness.

Lovinger, S. (2002). Addressing the unthinkable: Preparing to face smallpox. *Journal of the American Medical Association*. 288(20):2530.

This is an editorial summarizing the national situation on smallpox preparedness.

Mack, T. (2003). A different view of smallpox and vaccination. *New England Journal of Medicine*. 348(5):460-3.

The author offers an alternative viewpoint on the risk of smallpox and a government emphasis on developing a vaccine. Smallpox is not as contagious as has been suggested, and based upon transmission observed in Pakistan in the 1970s, spread is limited primarily to bedside. By utilizing today's high literacy rates and exposure to the media, people will know to avoid smallpox victims, and only hospital personnel and first responders will need to be vaccinated.

Martino, C. (2002). Psychological consequences of terrorism. *International Journal of Emergency Mental Health*. 4(2):105-11.

This article discusses the role of the media and the importance of early interventions in terrorism.

Mason, B.W. and Lyons, R.A. (2003). Acute psychological effects of suspected bioterrorism. *Journal of Epidemiology and Community Health*. 57(5):353-4.

Following an anthrax scare in Wales, the exposed individuals were given the Hospital Anxiety and Depression (HAD) Scale to determine if the psychological implications of chemical and biological weapons may be more serious than other threats. Results reveal significant acute psychological morbidity in the exposed persons following the anthrax scare.

McFee, R.B. (2002). Adolescent health and terrorism—the role of the adolescent medicine specialist. *Journal of Adolescent Health*. 30(5):300-1.

This is a letter to the editor discussing the psychological impact of terrorism on adolescents, detailing the risk of exposure to this group because of a tendency to congregate in large numbers, such as at school or malls, where a chemical attack may be more likely.

Monsen, R.B. (2002). Children and terror. *Journal of Pediatric Nursing*. 17(1): 62-3.

This is a personal reflection on the impact of the September 11 attacks on American children.

Moynihan, R. (2003). Health professionals challenge U.S. smallpox vaccination plan. *British Medical Journal*. 326(7382):179.

The report debates the merits of vaccinating hospital staff in the United States. Several major hospital conglomerates have opposed the national policy to vaccinate all hospital workers within a year.

North, C.S. and Pfefferbaum, B. (2002). Research on the mental health effects of terrorism. *Journal of the American Medical Association*. 288(5):633-6.

The authors give a brief overview of the complicated issues surrounding conducting disaster mental health research. The timing, selection of sample, assessment of disaster-related symptoms versus distress, and difficulties in interpreting data are all challenging elements of this work.

Norwood, A.E., Holloway, H.C., and Ursano, R.J. (2001). Psychological effects of biological warfare. *Military Medicine*. 166(12 Suppl):27-8.

This literature review discusses strategies for preparation and response to bioterrorism, as well as varying behavioral and psychological responses to natural, human-caused, and accidental disasters. The authors promote early psychosocial interventions and the importance of planning. Specific characteristics of biological weapons that enable them to be agents of terror are described.

Ottenstein, R.J. (2003). Coping with threats of terrorism: A protocol for group intervention. *International Journal of Emergency Mental Health*. 5(1):39-42.

The article details a group protocol to assist people in coping with the threat of terrorism.

Pfefferbaum, B., Pfefferbaum, R.L., Gurwitch, R.H., Nagumalli, S., Brandt, E.N., Robertson, M.J., Aceska, A., and Saste, V.S. (2003). Children's response to terrorism: A critical review of the literature. *Current Psychiatry Reports*. 5(2): 95-100.

The events of September 11 have spurred the authors to assess the impact of terrorist incidents on children. This literature review focuses specifically on the evaluation, diagnosis, and treatment processes of children following the 1993 bombing of the World Trade Center in New York City, the 1995 Oklahoma City bombing, the 1998 American Embassy bombing in Kenya, and the September 11 attacks.

Pfefferbaum, B., Nixon, S.J., Tivis, R.D., Doughty, D.E., Pynoos, R.S., Gurwitch, R.H., and Foy, D.W. (2001). Television exposure in children after a terrorist incident. *Psychiatry*. 64(3):202-11.

Within the context of emotional and physical exposure to the Oklahoma City bombing, this study of 2,000 middle school children in Oklahoma City revealed an association between the exposure of bomb-related television viewing and posttraumatic stress disorder (PTSD) symptomatology. The article advocates for research to determine whether television viewing predicts PTSD symptoms in children.

Saathoff, G. and Everly, G.S., Jr. (2002). Psychological challenges of bioterror: Containing contagion. *International Journal of Emergency Mental Health*. 4(4):245-52.

The article discusses shielding as a part of an overall response plan to bioterrorist attacks. The author emphasizes assisting with mental health to avoid rebuilding only the structures of society and leaving a community without a sense of humanity.

Salter, C.A. (2001). Psychological effects of nuclear and radiological warfare. *Military Medicine*. 166(12 Suppl):17-8.

People fear a nuclear or radiological attack in part because of their inability to sense the presence of radiation within their environment, as well as the long-term effects. The author predicts possible outcomes of a nuclear or radiological attack by assessing studies from the Hiroshima and Nagasaki attacks where the population suffered from widespread and severe anxiety, psychic numbing, survivor guilt, and psychosomatic reactions.

Saltzman, W.R., Layne, C.M., Steinberg, A.M., Arslanagic, B., and Pynoos, R.S. (2003). Developing a culturally and ecologically sound intervention program for youth exposed to war and terrorism. *Child and Adolescent Psychiatric Clinics of North America*. 12(2):319-42.

The author advocates for a partnership between public health and mental health to develop an early intervention program for youth. The author uses a program for adolescents in Bosnia-Herzegovina that includes assessment, training, and a community-based support structure. The article also describes a conceptual framework for public mental health interventions following terrorist attacks.

Sandman, P.M. (2003). Bioterrorism risk communication policy. *Journal of Health Communication*. 8 (Suppl 1):146-7, discussion 148-51.

The author applies a risk communication model to the September 11 attacks and to the possibility of a large-scale bioterrorism attack.

Shaw, J.A. (2003). Children exposed to war/terrorism. *Clinical Child and Family Psychology Review*. 6(4):237-46.

The article discusses the prevalence of psychological morbidities in children exposed to war or terrorism, specifically in the context of child soldiers, effects of parental absence, refugee status, and traumatic bereavement. The psychological reactions of war-related stressors are outlined, as well as possible indicators of posttraumatic stress disorder. Future research topics are recommended.

Smith, C.G., Veenhuis, P.E., and MacCormack, J.N. (2000). Bioterrorism. A new threat with psychological and social sequelae. *North Carolina Medical Journal*. 61(3):150-63.

The authors present an overview of the characteristics and threats of bioterrorism warfare within a historical context. The article further summarizes the state of national preparedness for such an attack and the anticipated social sequelae that may follow an attack. Interventions to lessen the psychological effects are discussed.

Stephenson, J. (2001). Medical, mental health communities mobilize to cope with terror's psychological aftermath. *Journal of the American Medical Association*. 286(15):1823-5.

This is a personal editorial on the national emotional situation in the weeks following September 11.

Strous, R.D., Stryjer, R., Keret, N., Bergin, M., and Kotler, M. (2003). Reactions of psychiatric and medical inpatients to terror and security instability in Israel. *Journal of Nervous and Mental Disease*. 191(2):126-9.

This is a brief report about a study to investigate the effect of the current security situation in Israel on psychiatric inpatients with schizophrenia. Findings indicate there is a significant effect, perhaps impacted by news media reports.

Wessely, S., Hyams, K.C., and Bartholomew, R. (2001). Psychological implications of chemical and biological weapons. *British Medical Journal*. 323(7318):878-9.

The authors question the psychological effects of placing chemical weapon detectors in Washington, D.C. subways, conducting chemical surveillance in public places by workers in space suits, and anthrax surveillance in emergency rooms.

SAMHSA and Other Publications

American Psychiatric Association

Coping with Bioterrorism Anxiety: Advice from the American Psychiatric Association

American Red Cross

Terrorism, Preparing for the Unexpected

American Red Cross

American Red Cross Homeland Security Advisory System Recommendations

American Red Cross

Anthrax Questions and Answers

American Red Cross

How Do I Deal with My Feelings?

American Red Cross

Why Do I Feel Like This?

American Red Cross

Facing Fear: Helping Young People Deal with Terrorism and Tragic Events

Federal Emergency Management Agency

Managing the Emergency Consequences of Terrorist Incidents—Interim Guidelines

Federal Emergency Management Agency

Tool Kit for Managing the Emergency Consequences of Terrorist Incidents

SAMHSA and Other Publications (continued)

Federal Emergency Management Agency

CONPLAN—Federal Interagency Domestic Terrorism Concept of Operations Plan

State Program Materials

Project Phoenix, New Jersey Crisis Counseling Program

Guide for Mental Health Counselors after Regional Vaccination Clinics

Project Phoenix, New Jersey Crisis Counseling Program

Coping with the Emotional Aspects of the Smallpox Vaccination

David Wee, Disaster Mental Health Coordinator

Mobile Crisis Team, City of Berkeley Mental Health Mental Health Impacts

California Department of Mental Health

Helping Your Employees Cope with the 9/11 Anniversary